

# How do I build MeshKit from scratch?

0. Prerequisites: MeshKit may require iMesh implementation for its mesh data structure and, if you'd like to read geometry files, requires iGeom implementation, so you'll need to build/install those first. In addition, if you'd like to relate mesh and geometry, requires iRel implementation. See MoabFromScratch and CgmFromScratch LassoFromScratch for instructions on the ANL implementations of those.

1. Grab the code straight from the repository using Subversion, by running 'svn co <https://svn.mcs.anl.gov/repos/fathom/MeshKit/trunk> MeshKit'.

2. Run 'autoreconf -fi' in the main source directory. NOTE: MeshKit relies on the autotools (autoconf, libtool, automake) that come with most LINUX/UNIX distributions. If they're not part of your OS, or you're getting mysterious autotools errors, you might want to try downloading/building more recent versions of those packages then trying again. On windows, try running cmake (though this is only indirectly supported, meaning it may not be up to date).

3. In the top-level source directory, run the configure script, with the various options you want. To get a list of options, run ./configure --help.

4. Run make, then make install. This will install the MeshKit include files, libraries, and binaries in include/, lib/, and bin/ subdirectories below the prefix directory input to the configure script (which is /usr/local by default - change with the --prefix= flag to configure.).

That's it!

If you have problems running 'autoreconf -fi' or suspect that the build system is broken do to improperly installed versions of the GNU autotools then see: AutoToolsIssues.

When using --with-cgm option and CGM is build using --with-cubit option you might encounter segmentation fault and \*\*\* glibc detected \*\*\* errors. See this link for details.